

METHODS AND SYSTEMS FOR MONITORING INTRACELLULAR BINDING REACTIONS

ABSTRACT

Intracellular binding reactions, and particularly DNA/DNA binding protein reactions are detected in situ, using intracellular fluorescence polarization detection. The methods comprise providing a biological cell having at least a first component of a binding reaction disposed therein. The cell is contacted with a second component of the binding reaction whereby the second component is internalized within the biological cell. At least one of the first and second components has a fluorescent label. The amount of binding between the first and second components within the cell is determined by measuring a level of polarized and/or depolarized fluorescence emitted from within the biological cell.